

Notice of Allowability

Application No.

10/786,009

Examiner

Alexis Wachtel

Applicant(s)

YAMAGUCHI ET AL.

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7-7-06.
2. ☒ The allowed claim(s) is/are 4-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Detailed Action

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Solomon on 8-25-06.

The application has been amended as follows:

Replace claim 10 with the following:

Claim 10 (currently amended). A first stirring apparatus comprising: a vertical cylindrical vessel which is substantially closed; a compartment inside of which a process solution provided is reacted; an inlet through which the process solution is supplied into the first compartment; stirring blades disposed in the compartment which stir a process solution there inside and rotate around a center of the compartment;
a second compartment, cylindrically shaped, disposed inside of the stirring blades;
a rotating shaft for the stirring blades of the first compartment, fixed to the stirring blades, which is disposed above the first compartment inside the cylindrical vessel and whose lower end is located above the stirring blades and the process solution, so that the stirring blades disposed in the first compartment are disposed without any counterpart rotating shaft at the center in the first compartment, around which center the

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stirring blades rotate; and the process solution stirring blades in the first compartment flows into the second compartment.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: with respect to claim 4, the closest prior art to Weber does not teach that each of the stirring blades rotate concentrically around the center of the cylindrical vessel and that a rotating shaft for the stirring blade of the outer compartment, fixed thereto, which is disposed above the inner compartment inside the cylindrical vessel and whose lower end is located above the inner compartment and is at a location higher than an upper edge of the partitioning cylinder. Buchanan teaches a reactor vessel (Fig.1) that has a stirring blade that agitates fluid in one single compartment. Therefore, it would not have been obvious to have modified the Weber reference to use a stirring blade as claimed in claimed 4 absent hindsight. Claim 5-9 depend on claim 4.

With respect to claim 10, the closest prior art Buchanan teaches a vertical cylindrical vessel which is substantially closed (7) which also defines a compartment; an inlet defined by (3), stirring blade defined by end of (7) which rotates around center of the compartment; a rotating shaft (define by upper portion of (7) fixed to the stirring blade. However, the shaft is not disposed above the compartment defined by (1), and is instead located in the compartment.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700